



Virginia Department of Environmental Quality
Division of Land Protection and Revitalization
Office of Financial Responsibility and Waste Programs
1111 E. Main St., Suite 1400, P. O. Box 1105, Richmond, VA 23218

FACT SHEET

DRAFT HAZARDOUS WASTE MANAGEMENT PERMIT FOR OPEN BURNING (OB) OF HAZARDOUS WASTES

March 24, 2021

<u>Facility Name</u>	Radford Army Ammunition Plant
<u>EPA Facility ID Number</u>	VA1210020730
<u>Owner/Operator</u>	U.S. Army/BAE Systems, Ordnance Systems Inc.
<u>Address of Facility</u>	4050 Peppers Ferry Road Radford, VA 24143
<u>Type of Permit</u>	Hazardous Waste Management Permit for Hazardous Waste Management Unit (HWMU), which consists of one (1) Open Burning (OB) treatment area.

Purpose of Fact Sheet

This fact sheet is prepared in accordance with the requirements of the Virginia Hazardous Waste Management Regulations (VHWMR), 9 VAC 20-60-124, as incorporated by reference under 40 CFR § 124.8. This fact sheet provides information on the current status of the facility, the facility background, the facility's current hazardous waste management activities, and the public comment period associated with the Draft Permit for Open Burning Treatment of Hazardous Wastes (OB Permit) for renewal.

Introduction - Facility Background - Draft Permit

Radford Army Ammunition Plant (RFAAP) is an operating hazardous waste management facility. The RFAAP encompasses approximately 4,104 acres of land and is located in southwest Virginia in Pulaski and Montgomery Counties approximately 5 miles northeast of the city of Radford, 10 miles west of Blacksburg, and 47 miles southwest of Roanoke. The New River separates Pulaski and Montgomery Counties and also divides the RFAAP into two (2) portions commonly known as the Horseshoe Area and the Main Manufacturing Area (MMA).

The OB Ground is located along the banks of the New River in the southeastern portion of the

horseshoe area bounded by the river.

RFAAP has been operating under a RCRA Subpart X permit issued on September 28, 2005 and effective on October 28, 2005. RFAAP submitted a RCRA Permit renewal application on June 15, 2015. A revised Permit application was submitted on September 17, 2015. Revisions were also received on May 6, 2016, September 14, 2016, February 10, 2017, March 22, 2018, May 23, 2018, June 18, 2018, October 9, 2018, November 28, 2018, February 15, 2019, March 7, 2019, April 23, 2019, May 14, 2019, October 25, 2019, December 19, 2019, March 27, 2020, May 28, 2020 and August 20, 2020. DEQ has reviewed the RCRA permit application and revisions, and found it to be complete and technically adequate on October 5, 2020.

Type of Waste

The major products of manufacture at RFAAP are solvent and solventless propellants that include single, double, and triple base powders; rocket propellants; as well as Load, Assemble, and Pack (LAP) medium caliber cartridges, larger mortar and artillery charges. The OB Ground is utilized as needed to burn waste pyrotechnics, explosives, and propellants. These hazardous wastes are generated through process inefficiencies, quality failures, and production overruns. Because these materials exhibit the characteristic of reactivity, they must be managed as hazardous waste. These materials are thermally treated at the OB Ground using elevated temperatures as the primary means to change their chemical and physical character. Wastes which cannot be safely treated in the RFAAP Incinerator (metal particles in the waste may damage the grinder system) are treated at the OB Ground.

Waste Treatment Process

Thermal treatment of hazardous waste is performed by open burning. The OB grounds consist of an area approximately 100 feet by 1,500 feet. The actual burning of explosive waste is performed in six foot by 18 foot burning pans on raised pads about 150 feet square. There are eight pads in the area, each consisting of two raised pans for a total of 16 pans. Burn pan operations are classified as either propellant (dry) or skid (wet) burns. Propellant burns require only the bulk propellant and an ignitor for the thermal treatment to be completed. Skid burns require the use of dunnage in the form of wood pallets and/or cardboard along with the addition of diesel fuel for thermal treatment to be completed.

Purpose of the Permitting Process

One of the purposes of the permitting process is to afford the DEQ, interested citizens, and other governmental agencies the opportunity to evaluate the proposed draft permit and the ability of the Permittee to comply with the applicable hazardous waste management requirements of the Permit and the VHWMR. The draft permit sets forth in one document all the requirements which the Permittee must comply with during the ten (10) year duration of the permit. These

requirements include, but are not limited to, the regulations as set forth in the VHWMR.

Draft Permit

The DEQ has reviewed the permit application, and has found the Part A and B permit application submittals to be technically adequate and complete to comply with the requirements of the VHWMR. Therefore, pursuant to the VHWMR, under 9 VAC 20-60-124, and as adopted by reference, 40 CFR § 124.6, the DEQ has prepared a draft permit for renewal.

The draft permit is divided into seven main parts, Modules I, II, III, IV, V, VI and VII, and a list of twenty-two permit attachments. Attachments II.A through VI.D are incorporated into the permit. The seven main parts of the permit are outlined below. The column entitled "Regulation," identifies the regulatory authority for the permit conditions in Parts I through VII of the Permit. The VHWMR, 9 VAC 20-60, has incorporated by reference the federal regulations under the Resource Conservation and Recovery Act (RCRA). Applicable citations of the RCRA regulations are provided below, as applicable.

Permit Organization

<u>Module</u>	<u>Topic</u>	<u>Regulation</u>	<u>Description</u>
Module I	Standard Conditions	40 CFR § 270.30 and 40 CFR § 270.32	Contains conditions which generally apply to all hazardous waste management facilities
Module II	General Facility Conditions	40 CFR § 264.13-17, 40 CFR § 264.32-34, 40 CFR § 264.37, 40 CFR § 264.52-56, and 40 CFR § 264.111-120	Outlines the general facility conditions
Module III	Operating Conditions	40 CFR § 264.602 and 603	Contains the operating conditions for the facility
Module IV	Detection Monitoring	40 CFR § 264.98	Contains the requirements for the groundwater detection monitoring for releases
Module V	Groundwater Compliance Monitoring Program	40 CFR § 264.92, 40 CFR § 264.96, 40 CFR § 264.97, 40 CFR § 264.99 and 40 CFR § 264.100	Contains the requirements for the groundwater compliance monitoring

<u>Module</u>	<u>Topic</u>	<u>Regulation</u>	<u>Description</u>
Module VI	Corrective Action and Groundwater Monitoring Program	40 CFR § 264.100	Contains the corrective action and groundwater monitoring requirements.
Module VII	Site-Wide Corrective Action	40 CFR § 264.101, and 40 CFR § 270.14	Outlines the corrective action procedures required by 40 CFR § 264.101

List of Permit Attachments

The following 22 permit attachments are incorporated into the proposed draft permit by reference. Upon approval of the draft permit, the attachments will be considered enforceable conditions of this permit.

Some of the attachment documents contain excerpts from the Permittee's hazardous waste permit application. Specific language excerpted from the permit application has been modified, as deemed necessary, so to be acceptable to the DEQ.

Attachment II.A	Facility Description
Attachment II.B	Waste Analysis Plan
Attachment II.C	Soil Monitoring Plan
Attachment II.D	Inspection Schedule
Attachment II.E	Personnel Training
Attachment II.F	Contingency Plan
Attachment II.G	Closure Plan
Attachment II.H	Security Provisions and Maintenance
Attachment II.I	100-Year Floodplain Protection Plan
Attachment III.A	Waste Minimization Plan
Attachment IV.A	Groundwater Monitoring Program Sampling and Analysis Plan
Attachment IV.B	Groundwater Monitoring List

Attachment IV.C	Initial Background Concentrations
Attachment V.A	Hydrogeological Maps/Figures for OBG (HWMU-13)
Attachment V.B	Compliance Groundwater Monitoring List
Attachment V.C	Open Burning Ground Calculated Background Values
Attachment V.D	Appendix IX of 40 CFR Part 264 Groundwater Monitoring List
Attachment V.E	Groundwater Protection Standards
Attachment VI.A	Source Area Evaluation Sampling and Analysis
Attachment VI.B	Semi-Annually Monitored Natural Attenuation Parameters and Analytical Methods
Attachment VI.C	Corrective Action Program – Annual Groundwater Monitoring List for Radford OBG/HWMU-13
Attachment VI.D	Historical Monitoring Data for Perchlorate and Carbon Tetrachloride

Financial Assurance

Financial assurance is not required as the facility is owned by the United States Army, a federal government agency, and is exempt from the financial assurance requirements under 40 CFR § 264.140(c).

Public Notice of Proposed Permit Actions

The purpose of public notice of a proposed permit action is to provide the DEQ, interested citizens, other governmental agencies, etc., the opportunity to evaluate and comment upon the draft permit action proposed for the subject facility. Permits are drafted to help assure facility compliance with the final RCRA Permit and the applicable requirements of the Virginia Hazardous Waste Management Regulations (VHWMR), 9 VAC 20-60.

<u>Comment Period:</u>	Begins:	March 24, 2021
	Ends:	May 24, 2021

The public and the Permittee have sixty-one (61) days to review and comment on the draft permit action proposed for the facility.

All persons who believe any condition of a draft permit or proposed permit action is inappropriate, shall raise all reasonably ascertainable issues and submit all reasonably available arguments and factual grounds supporting their position by May 24, 2021. Comments should include sufficient supporting material, including any pertinent technical or legal references and citations believed appropriate.

All comments and supporting rationale for such comments must be provided in writing to:

Ashby R. Scott, Hazardous Waste Permit Writer
Department of Environmental Quality
Office of Financial Responsibility and Waste Programs
P.O. Box 1105
Richmond, VA 23218
Phone: (804) 698-4467
Fax: (804) 698-4178
E-mail: Ashby.Scott@deq.virginia.gov

The DEQ will also accept comments from the public by e-mail. All comments received must provide your name, mailing address, phone number, and also must be received before the end of the comment period by May 24, 2021.

Information Session and Public Hearing:

A virtual information briefing will be held on April 21, 2021 from 6:30 pm to 7:30 pm. A virtual public hearing will be held on April 28, 2021 starting at 6:30 pm. The registration links for the virtual information briefing and public hearing is:

Informational Briefing: <https://attendee.gotowebinar.com/register/4221166289885215758>

Public Hearing: <https://attendee.gotowebinar.com/register/5964504647886944270>

Any interested parties unable to register for the event online should contact the permit writer, Mr. Ashby Scott, to request the phone number to participate. Copies of the proposed draft permit associated with the proposed permit reissuance and the existing Permit will be available upon request by any interested party prior to the virtual information meeting and public hearing and is also available on the DEQ's website (<https://www.deq.virginia.gov/permits-regulations/public-notice/land-protection>).

Public Information

The public may review the Draft Permit for the Open Burning Treatment of Hazardous Waste, the application, and this fact sheet at the following locations:

DEQ Blue Ridge Regional Office
Contact: Nichole Herschler
901 Russell Drive
Salem, VA 24153
Phone: (540) 562-6700
* Every work day by appointment

DEQ Office of Financial Responsibility and Waste Programs
Contact: Ashby Scott
1111 East Main Street, Suite 1400,
Richmond, VA 23219
Phone: (804) 698-4467
* Every work day by appointment

Radford Public Library
30 W. Main Street, Radford, VA 24141
Phone: (540) 731-3621
* During normal hours of operation

Procedures for Reaching a Final Permit Decision:

When making a final decision regarding this proposed permit action, the DEQ will consider all written comments received during the 61 day public comment period, and oral and written comments received during the public hearing, along with the requirements of the Virginia Hazardous Waste Management Regulations.

When the DEQ makes a final decision to either issue or deny the permit, final notice will be given to the applicant and each person who has submitted comments or requested notice of the final decision. The final notice will include a written response from the DEQ to each comment submitted and will indicate any changes in the draft permit action which may have been made in response to the comments. The proposed permit action will become effective 30 days after the final permit decision notice unless a change to the draft permit is requested pursuant to the VHWMR, 9 VAC 20-60-80, and the Virginia Administrative Process Act, § 2.2 4000, et seq., of the Code of Virginia and the Virginia Waste Management Board Public Participation Guidelines, 9 VAC 20-10. If no comments request a change in the draft permit, the decision shall become effective immediately upon issuance.